

Abstract Of The Disclosure

A method and system for signal generation and signal amplification from an array containing bound, unlabeled target molecules. Following exposure of the array to a sample solution containing unlabeled target RNA molecules, blunt ends are generated on each probe/target double-stranded hybrid. A labeled primer oligonucleotide linker is then bound to the blunt ends. Next, in an iterative, inner process, additional layers of labeled oligonucleotide linkers are added, shell-by-shell, to form a dendrimer-like molecular complex bound through the primer oligonucleotide linker to the probe/target hybrid.

S:\CLIENT FILES\AGILENT\APPS\35005 00025-3